Section 404(b)(1) Guidelines

Alternatives Analysis Section 230.10(a)

Section 404(b)(1) Guidelines: 40 CFR Part 230

- Binding regulations
- Primary environmental standard
- Developed by EPA in conjunction with Army
- Published December 24, 1980

Section 404(b)(1) Guidelines: Overview

- Mostly non-numeric, qualitative standards
- Relatively high degree of flexibility, adaptability
- □ Rule of "reason"

Section 404(b)(1) Guidelines: Overview

- Prohibit avoidable or significant adverse impacts
- Burden of proof on permit applicant
- Four independent tests

Section 404(b)(1) Guidelines: Standards

- 230.10(a) avoidance/alternatives
- ° 230.10(b) State WQ standards, toxic effluent standards, ESA...
- 230.10(c) significant degradation
- ^o 230.10(d) minimization

Section 404(b)(1) Guidelines: Sequencing

- Mitigation sequence:
 - · Avoid
 - · Minimize
 - Compensate
- Further explained in the 2008
 Compensatory Mitigation Rule
 http://www.epa.gov/wetlandsmitigation/

The Alternatives Test: Section 230.10(a)

• "...no discharge of dredged or fill material shall be permitted if there is a <u>practicable</u> alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."

Practicability

 "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.

40 CFR 230.3(q)

Overall Project Purpose

- Affects the range of alternatives
- □ Should:
 - \cdot be defined in fundamental terms
 - · reflect what is being proposed
 - · not be too broad

Framing the Project Purpose

Most Protective

Least Protective

Overall Project Purpose

- Underlying or public purpose
- Few modifiers
- · Includes broad range

Applicant's Specific Wishes

- Highly detailed
- Focus on minimizing cost and/or maximizing profitability
- · Excludes most alternatives

Practicability

 "Practicable" means <u>available</u> and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.

40 CFR 230.3(q)

Availability

^a If it is otherwise a practicable alternative, an area not presently owned by the applicant which could *reasonably* be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

40 CFR 230.10(a)(2)

Availability (cont.)

- Op to two acres of non-tidal wetlands for the construction or expansion of a home or farm building, or expansion of a small business, it is presumed that alternatives located on property not currently owned by the applicant are not practicable...
- Presumption may be rebutted in certain circumstances
- Must still minimize and compensate

1995 Memo re: flexibility for small landowners: www.epa.gov/owow/wetlands/guidance/landown

Availability (cont.)

- Zoning
- □ Market area
- Market entry

Basic Project Purpose: Water Dependency

Simplest description of what is being permitted is used to determine water dependency

Water Dependent Activities in Special Aquatic Sites

- Two presumptions:
 - $\boldsymbol{\cdot}$ practicable alternatives not involving a special aquatic site are available; and
 - · such alternatives are less damaging.
- Applicant must "clearly" rebut presumptions.

Special Aquatic Sites

- "Special Aquatic Sites" are:
 - sanctuaries and refuges
 - wetlands
- mud flats
- vegetated shallows
- coral reefs
- riffle and pool complexes

Water-Dependent Activities and Other Waters

• The applicant is required in every case ...to evaluate opportunities for use of non-aquatic areas and other aquatic sites that would result in less adverse impact on the aquatic ecosystem.

1993 Memo re: appropriate level of analysis www.epa.gov/owow/wetlands/guidance/flexible

Appropriate Project Purpose?

- Specific Number of housing units?
- Landfill serving a specific county?
- Specific "signature" type of golf course?

Practicability

"Practicable" means available and <u>capable of</u>
 <u>being done</u> after taking into consideration
 cost, existing technology, and logistics in light
 of overall project purpose.

40 CFR 230.3(q)

Feasibility

- Capable of being done
 - $\cdot \underline{\text{Cost}}$
 - $\boldsymbol{\cdot} \operatorname{Logistics}$
 - Existing technology

Cost

- The determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project.
- Generally, as the scope/cost of the project increases, the level of analysis should also increase.

1993 Memo re: appropriate level of analysis www.epa.gov/owow/wetlands/guidance/flexible

Cost (cont.)

- Can more expensive alternatives be feasible?
- What about sunk costs?
- What about profitability?

Cost (cont.)

"Our intent is to consider those alternatives which are reasonable in terms of the overall scope/cost of the proposed project. The term economic [for which the term "cost" was substituted in the final rule] might be construed to include consideration of the applicant's financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objectives of the Guidelines."

Guidelines Preamble, "Alternatives", 45 Federal Register 85339 (12/24/80)

Feasibility

- Capable of being done
 - \cdot Costs
 - Logistics
 - Existing technology

The Alternatives Test: Section 230.10(a)

"...no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."

Environmental Impact Analysis

- a practicable alternative should be rejected if it causes greater environmental damage
- trade-off issues
- other environmental impacts
- emphasis on avoiding impacts to aquatic resources

Reasonableness and Flexibility

- · Rigor of analysis should be commensurate with
 - Severity of impact
 - · Functions of the aquatic resource
 - Nature of the proposed activity
 - Temporary / permanent impacts
 Potential for secondary or cumulative impacts
 - Scope / cost of the project

1993 Memo re: appropriate level of analysis www.epa.gov/owow/wetlands/guidance/flexible

• Minor / Routine activities are not expected to have extensive testing 40 CFR 230.6

Reasonableness and Flexibility

- But, record must contain sufficient information to demonstrate compliance
- It is not appropriate to consider compensatory mitigation in determining whether a proposed discharge will cause only minor impacts.

1993 Memo re: appropriate level of analysis www.epa.gov/owow/wetlands/guidance/flexible

- Even "short form" evaluations must include sufficient information on the consideration of individual and cumulative impacts
- `` 40 CFR 230.6

Inadequate Information

• A permit cannot be issued if there is insufficient information to make a reasonable judgment...

40 CFR 230.12(a)(3)(iv)

Other Factors Related to the Alternatives Analysis

- NEPA
- Compensatory mitigation
- Supporting information

Other Factors Related to the Alternatives Analysis (cont)

- General permits
- After-the-fact permits
- $\ ^{\shortmid }\;SAMPs...$
 -how much is known about the area

Need for Project

- Is not discussed in 230.10(a)
- Is considered under Corps public interest review
- Is considered under NEPA

How It Works in Real Life

- $\mbox{\ }^{\square}$ In theory, all waters of the United States are protected.
- In practice, application of the alternatives test is often complex.
- Greatest opportunity to protect resources, but often hardest part to implement.

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National Perspective	
From a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special sites may represent an	
irreversible loss of valuable aquatic resources.	
40 CFR 230.1(d)	
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Questions?	
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